IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MONTANA BILLINGS DIVISION



MAR 3 1 2016

NORTHERN PLAINS RESOURCE COUNCIL INC.,

CV 14-60-BLG-SPW

Clerk, U.S. District Court District Of Montana Billings

Plaintiff,

OPINION and ORDER

VS.

UNITED STATES BUREAU OF LAND MANAGEMENT, UNITED STATES DEPARTMENT OF THE INTERIOR,

Defendants,

VS.

SIGNAL PEAK ENERGY, LLC,

Defendant Intervenor.

Plaintiff Northern Plains Resource Council ("Northern Plains") brought this action challenging a decision by Defendants United States Bureau of Land Management and the United States Department of the Interior (collectively "BLM") to lease coal located in Montana's Bull Mountains to Defendant Intervenor Signal Peak Energy, LLC ("Signal Peak"). Specifically, Northern Plains challenges the environmental assessment and subsequent finding of no

significant impact issued by BLM. All parties have moved for summary judgment. For reasons discussed below, the Court finds that BLM did not act arbitrarily or capriciously when it opted to forgo an environmental impact statement. The Court further finds in favor of BLM and Signal Peak in regards to most of Northern Plains' arguments regarding the adequacy of the environment assessment. However, the Court finds that the Interior Board of Land Appeals erred by not addressing one of Northern Plains' arguments made in the administrative process. Therefore, the Court remands the case back to the Interior Board of Land Appeals to consider that sole issue.

I. Background¹

The Bull Mountains are a mountain range located in south-central Montana between Roundup and Billings. While the Bull Mountains are not as high as other mountain ranges in Montana (the highest elevations in the Bull Mountains are around 4700 feet), the terrain is rugged with pine-covered ridges and flat-topped buttes with steep slopes. AR 150. Wildlife is diverse and plentiful in the Bull Mountains, with mule deer and elk constituting the two most commonly observed big game species. AR 149.

¹ The following information is taken from the Revised Administrative Record ("AR") filed by BLM on April 27, 2015. (Doc. 31.) There are 152 documents in the AR, and each page contains a Bates stamped number. When citing to the AR, the Court will cite to the document number and pinpoint cite to the Bates stamped number when necessary.

Relative to the surrounding area, the Bull Mountains have an abundant water supply. AR 150. At least 19 springs exist near Bull Mountain Mine No. 1 ("Mine"). AR 151. These springs supply water for livestock, wildlife, and vegetation. AR 24 at 379. Some of the springs provide very high quality water with low levels of dissolved solids. AR 13 at 229. Area ranchers consider this high quality water to be crucial to their cattle operations. AR 13 at 229-230 (Declaration of Steve Charter); AR 34 at 2449-2453 (Comment by Ellen Pfister).

Coal has been mined commercially near the current Mine site in the Bull Mountains since at least 1932. AR 24 at 326. Coal located in the Bull Mountains has a higher quality than other regionally-produced coal, due to its high heat value and low mercury content. AR 13 at 203-204. In the late 1980s, Meridian Minerals Company ("Meridian") acquired the rights to mine coal in the area around what would become the Mine. AR 24 at 326.

Soon after acquiring the rights, Meridian proposed a land swap with the federal government. AR 137. In exchange for nearly 10,000 acres of "high-value recreation and wildlife lands" located elsewhere in Montana, Meridian would receive about 3,670 acres of federally owned coal in the Bull Mountains. AR 137 at 11356. In 1990, BLM completed a 349-page environmental impact statement ("EIS") to help decide whether to accept the proposed land swap ("1990 EIS"). AR 137 at 11379. In the 1990 EIS, BLM analyzed both the proposed land swap

and three alternatives. AR 137. BLM also looked at the environmental effects if Meridian mined the coal. AR 137 at 11466-11501.

Specifically, the 1990 EIS contains analysis of two underground mining methods used to extract coal: (1) Room and pillar mining and (2) longwall mining. AR 137 at 11467-11518. Room and pillar mining is the older method of underground coal extraction and requires the creation of tunnels throughout a coal seam. AR 109 at 3250. The result is a checkerboard effect of empty areas of mined-out coal (the "rooms") and unmined "pillars" of coal. *Id.* The pillars are necessary to keep the ceiling from collapsing on the miners. *Id.* Eventually, after the mine is abandoned, the pillars can deteriorate and collapse. AR 109 at 3250-3251.

In contrast, longwall mining involves carving pillar-supported underground "hallways" into a coal seam to allow workers and longwall mining machinery into the seam. AR 109 at 3252. Machinery digs out coal as it moves along a path across the seam. *Id.* A system of support covers the machinery to prevent the mine's ceiling from collapsing on the machinery and the workers. *Id.* The support accompanies the machinery as it moves down the seam. *Id.* When the support moves, the unsupported ceiling collapses into the empty space formerly occupied by the coal. *Id.* This downward movement of rock and debris can be reflected on the surface as a "large subsidence trough." *Id.* The result is subsidence, which is

defined as the "lowering of surface elevations over an underground mine caused by loss of support and subsequent settling or caving of strata lying above the mine." 43 C.F.R. § 3480.0-5(a)(36). Because of subsidence, "[1]ongwall mining causes surface property damage." AR 109 at 3248. The potential surface damage includes "slope failure, surface cracking, and rock toppling." AR 24 at 495. Subsidence could result in risk to grazing livestock and could affect the flow or supply of water at wells and springs. AR 24 at 341, 343.

BLM stated in the 1990 EIS that "[s]ubsidence will definitely occur" due to operations at the Mine. AR 137 at 11501. While the subsidence was expected to be minor in areas of less than 40 feet of overburden, BLM predicted "major impacts to topography" as a result of longwall mining. AR 137 at 11402. BLM also predicted that the resulting surface fissures and slope failure could alter drainage patterns and change soil structure. *Id.* In regards to surface and groundwater, BLM predicted that both longwall and room and pillar mining would result in minimal impacts. AR 137 at 11403.

BLM estimated that room and pillar mining would result in the production of 0.5 million tons of coal per year from the Mine. AR 137 at 11467. In contrast, longwall mining would increase production to an estimated 3.0 million tons per year. AR 137 at 11468. BLM recommended accepting the proposed swap. AR 137 at 11358.

Meridian next applied to the State of Montana for a mining permit to develop the Mine as an underground coal mine. AR 117 at 3568. The relevant state agency prepared an EIS to analyze Meridian's application ("1992 EIS"). AR 117. Montana granted the mining permit to Meridian in 1993. AR 24 at 319. Signal Peak acquired the permit in 2008 and began employing longwall mining to extract coal at the Mine in 2009. AR 24 at 326, 362.

As predicted in the 1990 EIS, areas of land overlying the Mine have experienced surface damage as a result of longwall mining-caused subsidence. AR 13 at 226-230. An area rancher claims to have seen rocks that have been loosened from steep slopes and toppled into valley floors. AR 13 at 226. Cracks, also known as fissures, in the land have emerged, and the same rancher claims that the bigger cracks range from 6 to 15 feet wide, and some of them are 20 feet deep. AR 13 at 228.

In 2008, Signal Peak applied to lease an additional 2,679.9 acres of federal coal to extend the life of the Mine. AR 75. If awarded the lease, Signal Peak could mine much more than the federal coal. Ownership of the area's land is in a checkerboard pattern between federal, state, and private lands. AR 24 at 320. Signal Peak could not economically mine coal on the state and private lands without access through the federal coal reserves. AR 24 at 345. An estimated 61.4 million tons of federal coal are included in the lease. *Id.* Another 71.6 million tons

of coal are contained on state and private property that would be accessible through the federal lease. *Id.* The lease would prolong the Mine's productivity by an estimated seven years. AR 24 at 491.

BLM prepared a draft environmental assessment ("EA") to analyze Signal Peak's application for the lease. AR 62 at 2767. After reviewing the draft EA, BLM initially believed that it would have to complete an EIS due to, in part, the draft EA's references to the 1990 EIS or 1992 EIS. AR 62 at 2767-2769; AR 61. BLM's notes also indicate that it initially believed the project would significantly impact the environment, thereby necessitating an EIS. *Id.* Signal Peak disagreed and suggested that an EA would be sufficient. AR 62 at 2770.

BLM ultimately agreed and issued the 211-page final EA in April 2011. AR 24. In the EA, BLM addressed the potential environmental impacts of granting the lease. *Id.* The EA was tiered to several documents, including the 1990 EIS and 1992 EIS. AR 24 at 318-319. In addition to analyzing the effects of the proposed action (granting the lease), BLM looked at only one alternative, which was not granting the lease. AR 24 at 345.

After reviewing the EA, BLM issued a Finding of No Significant Impact/Decision Record ("FONSI") on April 15, 2011. AR 23. BLM concluded that granting Signal Peak's application for the lease "would not have significant environmental impacts" and would not "constitute a major federal action having

significant effect on the human environment." AR 23 at 305. Accordingly, BLM determined that an EIS was not required. *Id.* BLM opted to follow the EA's proposed action and offer the federal coal for lease. *Id.* The Court will later discuss the EA's and the FONSI's details.

Northern Plains appealed the FONSI to the Interior Board of Land Appeals ("Board"). AR 21. In its brief before the Board, Northern Plains essentially raised the same issues that are presently before this Court. AR 13 at 189. Northern Plains argued that BLM erred by: (1) Failing to prepare an EIS; (2) Relying on "stale, out-of-date data and information;" (3) Failing to analyze important data; (4) Failing to analyze the cumulative effects; and (5) Failing to consider other reasonable alternatives. *Id.* In its alternatives argument, Northern Plains argued that the EA did not take a hard enough look at the no action alternative. AR 13 at 208-209. Northern Plains also contended that BLM should have considered additional alternatives, such as:

[L]ease stipulations that the winning bid-holder and lessee be required to mitigate subsidence damage, lease stipulations that any degradation to water quality be restored to the same water quality as existed premining, requirement of bonding measures to protect landowners and the public, making the lease seam-specific, and examination of alternative mining techniques to long-wall mining such as the room and pillar mining (in which the pillars keep the overburden from collapsing, eliminating or lessening subsidence issues).

AR 13 at 209.

The Board affirmed the BLM's FONSI on October 22, 2012. AR 1. In its decision, the Board concluded that BLM adequately considered the likely environmental impacts caused by the Mine's expansion. AR 1 at 5-6. The Board also concluded that BLM did not err by tiering the EA to the 1990 EIS and 1992 EIS. AR 1 at 6. The Board also found that BLM adequately considered the cumulative impacts of leasing the federal coal. AR 1 at 8-10. However, the Board did not address or mention Northern Plains' argument that BLM did not consider an adequate range of alternatives.

Northern Plains filed the instant action against BLM on May 14, 2014, and allege several violations of the National Environmental Policy Act ("NEPA").

Northern Plains asks this Court to overturn the Board's decision affirming BLM and "issue a mandatory injunction ordering BLM to prepare an adequate NEPA document." (Doc. 1 at 22.) Northern Plains also requests an order voiding Signal Peak's lease. (*Id.*) This Court allowed Signal Peak to intervene as a defendant (Doc. 14.)

On June 30, 2015, Northern Plains moved for summary judgment. In support of the motion, Northern Plains advances the following arguments: (1) BLM erred by not preparing an EIS; (2) Even assuming that an EIS was not required, the EA prepared by BLM is inadequate; (3) BLM failed to adequately assess cumulative impacts; and (4) The Board and BLM erred by not considering a

reasonable range of alternatives. BLM and Signal Peak filed cross-motions for summary judgment.

II. Standards

A. Summary Judgment Standard

Summary judgment is proper when "the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed.R.Civ.P. 56(c). An issue is "genuine" only if there is a sufficient evidentiary basis on which a reasonable fact finder could find for the nonmoving party and a dispute is "material" only if it could affect the outcome of the suit under the governing law. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). "In reviewing an administrative agency decision, summary judgment is an appropriate mechanism for deciding the legal question of whether the agency could reasonably have found the facts as it did." *City & Cty. of San Francisco v. United States*, 130 F.3d 873, 877 (9th Cir. 1997) (internal citation omitted).

B. Standard of Review Under the Administrative Procedure Act

The parties agree that this Court is reviewing the Board's decision under the Administrative Procedure Act ("APA"). Under the APA, a reviewing court should set aside an agency decision if the decision is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).

Although this review is "searching and careful," the arbitrary and capricious standard is narrow, and this Court cannot substitute its own judgment for that of the agency. *In Defense of Animals v. U.S. Dept. of Interior*, 751 F.3d 1054, 1061 (9th Cir. 2014). An agency's decision is arbitrary and capricious if it fails to consider important aspects of the issue before it, if it supports the decision with explanations contrary to the evidence, or if its decision is either inherently implausible or contrary to governing law. *Id*.

III. Whether an EIS was required

Northern Plains argues than an EA was insufficient to analyze Signal Peak's application. Instead, Northern Plains contends that both the BLM's NEPA Handbook and the "significance factors" require that BLM prepare an EIS. BLM and Signal Peak argue that the NEPA Handbook does not require an EIS in a leasing decision and that BLM and the Board reasonably concluded that the "significance factors" did not compel an EIS. The Court agrees with BLM and Signal Peak.

NEPA reflects the federal policy "to use all practicable means and measures...to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans." 42 U.S.C. § 4331(a). NEPA does not create any substantive requirements. Sierra Forest Legacy v. Sherman, 646

F.3d 1161, 1177 (9th Cir. 2011). "Rather, NEPA imposes only procedural requirements on federal agencies with a particular focus on requiring agencies to undertake analyses of the environmental impact of their proposals and actions."

Dep't of Transp. v. Pub. Citizen, 541 U.S. 752, 756-57 (2004). By forcing an agency to focus on possible "environmental consequences of a proposed project, NEPA ensures that important effects will not be overlooked or underestimated only to be discovered after resources have been committed or the die otherwise cast."

Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989).

NEPA requires agencies to produce an EIS for "major Federal actions significantly affecting the quality of the human environment..." 42 U.S.C. § 4332(C). The agency may prepare an EA to determine whether the proposed action is significant enough to require the production of an EIS. 40 C.F.R. §§ 1501.4(b), (c); *Pub. Citizen*, 541 U.S. at 757. An EA is a "concise public document" that "include[s] brief discussions of the need for the proposal, of alternatives as required by [42 U.S.C. § 4332(2)(E)], of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted." 40 C.F.R. §§ 1508.9(a), (b); *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1239 (9th Cir. 2005).

The agency reviews the EA to determine whether the proposed action "significantly" affects the environment, thereby necessitating an EIS. *Pub. Citizen*,

541 U.S. at 757. An EIS is required when there are "substantial questions whether a project may have a significant effect on the environment." *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998) (internal quotation omitted). To determine whether the environmental effects are "significant," the agency looks to the regulations propounded by the Council on Environmental Quality ("CEQ"). *Ocean Advocates v. U.S. Army Corps of Engineers*, 402 F.3d 846, 865 (9th Cir. 2005). The CEQ determined that significance requires the consideration of both "context and intensity." *Id*; 40 C.F.R. § 1508.27. Ten "significance factors" are used to evaluate intensity:

- (1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
- (2) The degree to which the proposed action affects public health or safety.
- (3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- (4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- (5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
- (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

- (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
- (8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
- (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- (10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

40 C.F.R. § 1508.27(b). The presence of "one of these factors may be sufficient to require preparation of an EIS in appropriate circumstances." *Ocean Advocates*, 402 F.3d at 865.

"If, in light of the EA, the agency determines that its action will significantly affect the environment, then an EIS must be prepared; if not, then the agency issues a FONSI." *Metcalf v. Daley*, 214 F.3d 1135, 1142 (9th Cir. 2000); 40 C.F.R. § 1501.4(e)(1). The FONSI must briefly present the reasons why the agency believes an EIS is unnecessary. 40 C.F.R. § 1508.13. This "convincing statement of reasons" must adequately explain why the project's impacts are insignificant. *Metcalf*, 214 F.3d at 1142.

A reviewing court must uphold the decision to issue a FONSI instead of preparing an EIS unless the agency's decision is arbitrary and capricious. *City of Las Vegas*, *Nev. v. F.A.A.*, 570 F.3d 1109, 1115 (9th Cir. 2009). This standard requires courts to "ensure that an agency has taken the requisite 'hard look' at the environmental consequences of its proposed action, carefully reviewing the record to ascertain whether the agency decision is founded on a reasoned evaluation of the relevant factors." *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1332 (9th Cir. 1992) (internal quotation omitted). This Court must defer to the agency's discretion if it is "truly informed." *Id*.

Here, the Court finds that the Board did not err when it concluded that BLM took the requisite "hard look" at the environmental consequences of the proposed lease and made a reasoned decision to issue the FONSI. Northern Plains argues that five of the "significance factors" show that the project is significant enough to require the production of an EIS. First, Northern Plains points to 40 C.F.R. § 1508.27(b)(7) and argues that BLM did not look to the cumulative impacts of the lease. Specifically, Northern Plains claims that BLM did not adequately look to the foreseeable effects of mining not only the federal coal, but also the state and private coal that would become accessible to Signal Peak.

Section 1508.27(b)(7) provides that a project is significant "if it is reasonable to anticipate a cumulatively significant impact on the environment." A

cumulative impact is "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions..." 40 C.F.R. § 1508.7. The agency is required to take a hard look at all reasonably foreseeable actions that could impact the environment. *Te-Moak Tribe of W. Shoshone of Nevada v. U.S. Dep't of Interior*, 608 F.3d 592, 603 (9th Cir. 2010).

The Court finds that BLM took a hard look at the cumulative impacts of leasing the federal coal, including the mining of the adjoining state and private coal. In the FONSI, BLM stated that it:

[E] valuated the possible actions in context of past, present and reasonably foreseeable actions. Present and future mining activities in the area were considered and significant cumulative effects are not anticipated. A complete disclosure of the effects of the project is contained in Chapter 4 of the EA.

AR 13 at 304. Chapter 4 of the EA is a 69-page discussion of the environmental consequences of both the proposed action and the no action alternative. AR 24 at 440-509. This discussion includes analyses of the impacts on 19 different topics, including the impacts on topography, water resources, ownership and use of land, and wildlife. *Id.* BLM did not just analyze these impacts on federally-owned land, but rather looked to all the land included within the Life of Mine area. AR 24 at 444. The Life of Mine area includes state and private coal that Signal Peak would be able to mine after obtaining the federal lease. AR 24 at 320, 326. Accordingly,

BLM did analyze the effects that the proposed action would have on neighboring state and private lands.

In addition, BLM examined the cumulative impacts that continued mining at the Mine would have. AR 24 at 495. BLM concluded that "the effects of other underground mining in the Bull Mountains would be cumulative." *Id.* BLM acknowledged that continued longwall mining would result in subsidence over the mined areas, and that this subsidence may lead to slope failure, disruption of groundwater flow, and disruption of land use. *Id.* However, the accumulation of the impacts are not likely to reach "a moderate or severe level." *Id.* The EA provides that these impacts could be mitigated and the resources would recover once mining ceases. *Id.* Northern Plains does not show that BLM failed to make an informed decision regarding the cumulative impacts.

Second, Northern Plains argues that BLM failed to adequately assess the "degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration." 40 C.F.R. § 1508.27(b)(6). Northern Plains claims that the lease will establish a precedent for the future mining of adjoining state and private coal. The purpose of this significance factor is "to avoid the thoughtless setting in motion of a chain of bureaucratic commitment that will become progressively harder to undo the longer it continues." *Presidio Golf Club v. Nat'l Park Serv.*, 155

F.3d 1153, 1162-63 (9th Cir. 1998). It does not apply to unique and independent projects. *Id.* at 1163.

BLM bluntly stated in the FONSI that "[t]his decision in not precedent setting." AR 13 at 303. Northern Plains has not shown how this lease will establish unforeseen precedent or create an unstoppable series of bureaucratic action. *Presidio Golf Club*, 155 F.3d at 1162-63. As discussed above, BLM considered the impact that the lease would have on adjoining private and state lands.

Third, Northern Plains argues that "the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks" favors a finding of significance. 40 C.F.R. § 1508.27(b)(5). Northern Plains contends that BLM did not adequately assess the effects of subsidence, rendering the effects of longwall mining in the Bull Mountains highly uncertain. General statements about possible effects do not constitute a "hard look" at uncertain or unknown risks. *Blue Mountains Biodiversity Project*, 161 F.3d at 1213-14. However, § 1508.27(b)(5) does not require "an EIS anytime there is *some* uncertainty, but only if the effects of the project are highly uncertain." *Envtl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1011 (9th Cir. 2006) (emphasis in original).

BLM concluded in the FONSI that there are not any highly uncertain effects or unique and unknown risks. AR 13 at 303. This conclusion is supported by the EA. Topographic surveys were completed both before and after Signal Peak began longwall mining in 2009. AR 24 at 362. The surveys revealed that subsidence has occurred and that the surface elevation has been reduced in some areas by an estimated maximum of six feet. *Id.* In addition, cracks have developed and some large rocks on steep slopes have been displaced. *Id.* BLM claims that subsidence has not caused any observable effects on water resources. *Id.* Pursuant to Signal Peak's mining permit, further monitoring is required. *Id.* In the nearterm, the effects of longwall mining-caused subsidence are not highly uncertain, as BLM has studied the effects since Signal Peak began longwall mining.

In the FONSI, BLM acknowledged that there "is some scientific uncertainty regarding the long-term effects of subsidence and how these effects can be managed." AR 13 at 303. However, BLM examined the recent data and studies and concluded that the "overall effects from mining-related subsidence would be...negligible over the long term." AR 24 at 445. BLM also concluded that any subsidence could be monitored and mitigated, thereby reducing the risk of long-term negative effects. *Id.* BLM made an informed decision that the lease would not carry "highly uncertain" effects and risks.

Fourth, and in an argument related to the previous one, Northern Plains argues that BLM did not adequately assess the "degree to which the effects on the quality of the human environment are likely to be highly controversial." 40 C.F.R. § 1508.27(b)(4). In this context, "controversial" means that there "is a substantial dispute about the size, nature, or effect of the major Federal action rather than the existence of opposition to a use." *Blue Mountains Biodiversity Project*, 161 F.3d at 1212 (internal quotations and brackets omitted). "Put another way, a proposal can be considered controversial if substantial questions are raised as to whether a project ... may cause significant degradation of some human environmental factor." *Anderson v. Evans*, 371 F.3d 475, 489 (9th Cir. 2004) (internal quotation omitted). As discussed above, the Court finds that BLM adequately considered the effects of continued mining. There is no dispute about the size and nature of the lease.

Fifth, Northern Plains argues that the "degree to which the proposed action affects public health or safety" favors a finding of significance. 40 C.F.R. § 1508.27(b)(2). BLM stated in the FONSI that the potential risks to public safety would be low, and that any risks would occur in brief periods. AR 13 at 303. Mitigation measures would be implemented near roads and structures when subsidence would occur. AR 13 at 302-303. These mitigation measures include the requirement that Signal Peak publish a mining schedule at least six months prior to mining under an individual's property. AR 24 at 487. BLM concluded

that this would provide adequate warning of periods of risk and minimize the potential risk to humans and livestock. *Id.* Based on the consideration of the risk and the mitigation measures required of Signal Peak, the Court finds that BLM acted within its discretion when it concluded that the proposed lease would not significantly affect public health and safety.

Northern Plains points to BLM's initial reluctance to forego an EIS as evidence that the CEQ regulations require an EIS. However, an agency is permitted to reverse course after considering the relevant factors. *Butte Envtl. Council v. U.S. Army Corps of Engineers*, 620 F.3d 936, 946 (9th Cir. 2010). After reviewing the EA, BLM changed its mind, "something that, as long as the proper procedures were followed, they were fully entitled to do." *Nat'l Ass'n of Home Builders v. Defs. of Wildlife*, 551 U.S. 644, 659 (2007). This Court can only review the final decision, and BLM's earlier position is not evidence that the CEQ's regulations require the production of an EIS. *Id*.

In addition to its arguments about the "significance factors," Northern Plains also argues that BLM's NEPA Handbook requires the production of an EIS.

Under a section entitled "ACTIONS REQUIRING AN EIS," BLM's NEPA Handbook provides:

The following actions normally require preparation of an EIS:

...(7) Approval of any mining operation where the area to be mined, including any area of disturbance, over the life the mining plan is 640 acres or larger in size.

BLM NEPA Handbook H-1790-1, p. 69-70 (January 2008).² Since the mining plan is well over 640 acres, Northern Plains argues that its own guidance requires BLM to produce an EIS. BLM and Signal Peak argue that the above-cited section of the NEPA Handbook is inapplicable to leasing decisions. The Court agrees with BLM and Signal Peak.

BLM's NEPA Handbook states that an EIS is normally needed before approving "any mining operation" exceeding 640 acres. Here, BLM did not approve a mining operation, but rather approved an application to lease the coal. Signal Peak needed to separately apply to the Office of Surface Mining Reclamation and Enforcement ("OSMRE") to actually mine the federal coal. *See* 40 C.F.R. §§ 746.1 *et seq.* Signal Peak previously submitted the application, and the OSMRE issued an EA and a FONSI analyzing that application in January 2015.³ Since BLM did not approve a mining operation, the Court concludes that this portion of BLM's NEPA Handbook is inapplicable to the leasing decision.

² The NEPA Handbook can be found at http://www.blm.gov/style/medialib/blm/wo/Information_Resources_Management/policy/blm_handbook.Par.24487.File.dat/h1790-1-2008-1.pdf (last accessed March 30, 2016).

³ The EA and FONSI can be found at http://www.wrcc.osmre.gov/initiatives/bullMountainsMine.shtm (last accessed March 30, 2016).

In conclusion, the Court finds that the Board correctly determined that BLM did not act arbitrarily or capriciously when it issued a FONSI instead of preparing an EIS. BLM took a hard look at the "significance factors" and made an informed decision that the lease's effects are not significant as defined by the CEQ's regulations. Since BLM reasonably evaluated the factors, this Court is required to defer to its conclusion that an EIS is not required.

IV. Adequacy of the EA

Northern Plains argues that even if an EIS was not required, the EA is deficient. Specifically, Northern Plains contends that (1) BLM relied on stale information; (2) BLM improperly tiered to the 1990 EIS and the 1992 EIS; (3) BLM failed to adequately address water quality impacts; (4) BLM failed to address slope failure; and (5) BLM failed to address potential impacts from mining techniques other than longwall mining. Mindful that an EA's sufficiency should be analyzed as a whole, *S. Oregon Citizens Against Toxic Sprays, Inc. v. Clark*, 720 F.2d 1475, 1480 (9th Cir. 1983), the Court will address each argument in turn.

A. Whether BLM relied on stale information

Northern Plains argues that BLM impermissibly relies upon the 1990 EIS and 1992 EIS. In addition to being over 25 years old, the 1990 EIS and 1992 EIS only contained predictions of what effects longwall mining would have on the surface. Since longwall mining has been ongoing at the Mine, Northern Plains

contends that BLM should have included updated data. BLM and Signal Peak argue that Northern Plains overstates the extent that the EA relies upon older data. For its part, the Board found no error in BLM's use of the older data.

To the extent possible, an EA should rely upon up-to-date data. *Lands Council v. Powell*, 395 F.3d 1019, 1031 (9th Cir. 2005). An agency may act arbitrarily and capriciously by relying upon data that is too stale. *N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1086 (9th Cir. 2011).

The Court agrees with BLM and Signal Peak and finds that BLM did not rely upon outdated information in the EA. Northern Plains correctly notes that the EA was tiered to the 1990 EIS and the 1992 EIS, and those documents did not have the benefit of observing the effects of longwall mining in the Bull Mountains. In the 1990 EIS, BLM predicted that although subsidence would "definitely occur," the surface would "exhibit little disruption." AR 137 at 11501. Contrary to Northern Plains' assertions, BLM did not rely upon the predictions made in the 1990 EIS and 1992 EIS. Instead, the EA incorporated data learned as a result of topographic surveys taken before and after Signal Peak began longwall mining in 2009. AR 24 at 362. BLM acknowledged that some subsidence has occurred, and it provides photographic evidence of cracks developing above mined areas. AR 24 at 363. Because it was based on recent observations, this data was not stale.

BLM also stated in the EA that there "have been no observable effects to groundwater or surface water resources." AR 24 at 362. Area springs were analyzed based on information provided by an area rancher in 2010 and Signal Peak's field monitoring observations from 2010. AR 24 at 382. BLM used this data from 2010 to analyze the predicted impacts that subsidence would have on the springs. AR 24 at 464-65. BLM also applied 2009 data on the air quality at the Mine's surface facilities, AR 24 at 449, as well as 2008 wildlife surveys, AR 24 at 415.

Finally, BLM incorporated Signal Peak's mine permit application with the State of Montana into the EA. AR 24 at 319. Although the permit was originally issued in 1993, it is a "living document" that is continually revised to reflect changes in the Mine's facilities and operations. *Id.* Specifically, BLM referenced Signal Peak's 2009 permit application when analyzing the affected environment. AR 24 at 352.

In sum, BLM did not rely upon stale data in the EA. Although it is tiered to the 1990 EIS and 1992 EIS, BLM includes updated information about subsidence that has occurred since Signal Peak began longwall mining. This updated data included information about subsidence and its predicted effect on area water sources. The Board did not err when it concluded that the EA contains current information. AR 1 at 6.

B. Whether the EA was improperly tiered to the 1990 EIS and 1992 EIS

Northern Plains next argues that BLM improperly tiered the 1990 EIS and 1992 EIS to the EA. It contends that since the 1990 EIS and 1992 EIS were site-specific, they could not tiered to the current site-specific EA. BLM counters that Northern Plains misreads the relevant regulation and that it was appropriate to incorporate information from the older EISs.

"Tiering" is defined as:

[T]he coverage of general matters in broader environmental impact statements...with subsequent narrower statements or environmental analyses...incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared. Tiering is appropriate when the sequence of statements or analyses is:

- (a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.
- (b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.

40 C.F.R. § 1508.28. Tiering is encouraged avoid repetitive discussions of issues previously addressed in another EIS. *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1073 (9th Cir. 2002) (quoting 40 C.F.R. § 1502.20).

The Court finds that the BLM acted within its discretion when tiering the 1990 EIS and 1992 EIS to the EA. As noted in § 1508.28(a), tiering is appropriate from a "program, plan, or policy" EIS to a "site-specific...analysis." The regulation does not restrict tiering only from a programmatic EIS. Since the 1990 EIS and 1992 EIS were plan EISs, it was appropriate to tier their background information and analysis to the EA.

Further, BLM did not simply tier from the older EISs and neglect to update the data. As discussed in the preceding section, the EA included updated data and analysis where necessary. The Board did not err when it rejected Northern Plains' argument that the tiering was impermissible. AR 1 at 6.

C. Water Quality Analysis

Northern Plains argues that the EA contains an insufficient analysis of the possible effects on water quality. Northern Plains contends that the water quality analysis lacks adequate data and impermissibly defers collection of updated information until additional mining takes place. BLM and Signal Peak claim that Northern Plains misrepresents the record and point to the EA's section analyzing the predicted effects that additional mining will have on water resources.

The Court finds that BLM took the requisite "hard look" at the impact on water quality. The EA contains a 31-page section on the anticipated effects that further mining would have on the area's water resources. AR 24 at 452-483. BLM

acknowledged that the Mine may cause changes to the ground and surface water quality and quantity due to "subsidence, mine dewatering, and geochemical processes." AR 24 at 452. Mine dewatering occurs when water seeps into the underground cavities after the coal is removed. AR 24 at 454. To assess potential changes, BLM considered the effects of subsidence on "aquifer characteristics, groundwater flow, recharge capacity, springs and the alluvium." AR 24 at 452. BLM also considered the effects caused by groundwater flow into the mine and changes to water quality by chemical processes. *Id*.

To look at the hydrologic impacts on the groundwater, BLM used an industry standard and EPA-verified software package called MODFLOW-SURFACT. *Id.* BLM inputted observed water levels from well monitoring data in addition to the area water's characteristics into a site model developed to represent the area's hydrologic and geologic conditions. AR 24 at 452-53. The data came from Signal Peak's mining permit application submitted in 2009. AR 24 at 453. The model's results are displayed on three graphics that represent the affected area after mining and mine dewatering ceases, five years after dewatering ceases, and 25 years after dewatering ceases. AR 24 at 455-458. BLM also summarizes the model's results. AR 24 at 460.

Those models do not account for any subsidence, but note that subsidence would decrease the recovery period. AR 24 at 455. To estimate the effects of

subsidence on the mined area, BLM relied upon a pair of studies completed in 1989 and 1990 by J.F.T. Agapito and H.N. Maleki. AR 24 at 461. These studies concluded that three zones of deformation would develop because of subsidence. Id. BLM estimated that impacts on groundwater flow and aquifer recharge due to subsidence would be limited to the Fragmented Zone – which is the area from the roof of the mine to about 2 to 10 times the mining height. AR 24 461, 463. In its Complaint, Northern Plains argues that the 1989 and 1990 Agapito studies have been rendered obsolete by a 2006 Agapito study. (Doc. 1 at 17.) The study referred to by Northern Plains summarized and briefly discussed other models and findings related to the effect of underground mining. AR 13 at 219-224. However, also in 2006, Agapito opined in a letter that he did not change his 1990 subsidence predictions regarding the Mine. AR 6 at 144. Agapito actually predicted that changes made to the mining plans "should produce a smoother, more favorable, subsidence basin." Id.

The EA also contains analysis and predictions on what effect mining operations would have on the area springs. AR 24 at 464-468. This section compiles different risk factors, such as hydrology and topography, to assign a probability that each particular spring would be impacted by the mining. *Id.*Ultimately, BLM concluded that of 29 area springs, 10 have a low potential for impact, 15 have moderate potential, and four have high potential. AR 24 at 468.

BLM acknowledged that these are predictions, and that actual impacts are unknown. *Id.* Mitigation measures to replace springs have been developed in areas that have a probability of being impacted. AR 24 at 470.

As for groundwater quality, BLM predicted that mining would not result in "significant increased degradation." AR 24 at 471. Groundwater that does not come in contact with rocks immediately above the mined area should not be affected. *Id.* BLM stated that there could be an increase in dissolvable solids and sodium and sulfate concentration in water that flows through the mine waste and fractured zones immediately above the mined area. *Id.* These elevated levels of sulfate could negatively impact livestock that drink the water. AR 24 at 477. Acknowledging that potential problem, BLM notes the need to regularly monitor the water quality. AR 24 at 472, 479. Replacement water "may need to be identified promptly to mitigate the effects of elevated sulfate concentrations." AR 24 at 479.

Contrary to Northern Plains' assertions, the Court finds that BLM took a hard look at the available and current data when it analyzed the impacts that mining could have on the water resources. The EA's analysis may "rely on long-term modeling, despite the inherent uncertainty of projections." *Sierra Forest Legacy*, 646 F.3d at 1180. The EA's statements about continued monitoring is a reflection of that inherent uncertainty, not an attempt to defer analysis.

The Board concluded that BLM adequately considered the effects on water resources. AR 1 at 5. The Court understands that water is the "lifeblood" of ranchers, (Doc. 34 at 22), and that area ranchers are concerned that the Mine might result in lower quality water for their livestock. AR 13 at 229-30; AR 34 at 2449-2453. However, since BLM's decision was "fully informed and well-considered," the Court is required to defer to the agency. *Blue Mountains Biodiversity Project*, 161 F.3d at 1211.

D. Slope Failure Analysis

Northern Plains next argues that BLM did not adequately consider the potential for slope failure caused by longwall mining. BLM and Signal Peak point to the EA's analysis and contend that it constitutes a hard look at the possibility of slope failure and the resulting effects. The Court agrees with BLM and Signal Peak.

BLM addressed the Mine's potential impacts on the area's topography and physiography. AR 24 at 444-48. Along subsidence troughs, BLM noted that "slope failure and toppling of sandstone rocks that outcrop may occur." AR 24 at 445. BLM acknowledged that one possible consequence of subsidence would be rockslides in areas with steep slopes. AR 24 at 334. Slope failure is most likely to occur on steep slopes, such as cliffs and bluff edges, with a 25 percent to 50 percent grade. *Id.* The EA contains a topographic map that depicts steep slopes in

the area where slope instability and failure is most likely to occur. AR 24 at 445-446.

To mitigate, BLM notes that there is presently a monitoring program at the Mine to collect subsidence data. AR 24 at 445. In addition, Signal Peak would publish its mining schedule at least six months prior to mining. AR 24 at 487. This would minimize the risks caused by falling rocks by allowing ranchers to move livestock out of the area. AR 24 at 33.

The Court finds that BLM took a hard look at the possibility of slope failure. It candidly admitted that slope failure is a distinct possibility on slopes with steep grades. The map indicates where such slope failure is likely to occur. These predictions are consistent with observations reported by area ranchers.

E. Other Mining Techniques

Northern Plains argues BLM does not address the potential impacts from mining techniques other than longwall mining. This argument is similar to its alternatives argument. As discussed below, the Court is remanding the case back to the Board to consider Northern Plains' alternatives argument. Due to the similarity of the arguments, the Court declines to address whether BLM was required to consider impacts from alternative mining techniques until the Board decides whether BLM actually needed to consider alternative mining methods.

V. Cumulative Impacts

In an argument separated from its other challenges to the EA, Northern Plains contends that BLM failed to address the cumulative impacts of the lease. Specifically, Northern Plains posits that BLM failed to analyze the impacts that mining would have on the adjoining private and state coal that Signal Peak would be able to mine. Northern Plains also faults BLM for not analyzing the potential impacts for future mining of coal to the north of the proposed mining area and for which there are presently no mining plans. BLM and Signal Peak counter that the EA explicitly includes the adjoining private and state land in its analysis. BLM and Signal Peak also point to the EA's section on cumulative impacts.

An EA is required to "fully address cumulative environmental effects or 'cumulative impacts." *Te-Moak Tribe*, 608 F.3d at 602. As mentioned earlier, cumulative impacts are the impacts "on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. A cumulative impact analysis cannot be deferred to a future date. *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998). However, BLM does not need to consider speculative or hypothetical scenarios. *Headwaters, Inc. v. Bureau of Land Mgmt., Medford Dist.*, 914 F.2d 1174, 1182 (9th Cir. 1990).

The Court finds that BLM adequately considers the cumulative impacts of further mining. Contrary to Northern Plains' assertion, the EA does consider the impacts of future mining on adjoining non-federal lands. As mentioned earlier, BLM analyzed the impacts in the whole Life of Mine Area, which includes the state and private coal that Signal Peak will be able to access after obtaining the federal lease. AR 24 at 320, 326, and 444.

The EA has sections entitled "Past and Present Actions" and "Reasonably Foreseeable Action Scenario." AR 24 at 494. BLM noted that additional coal mining north of the Mine is foreseeable once coal reserves opened up by the proposed lease are exhausted. *Id.* BLM concluded that this is not a "reasonably foreseeable action." *Id.* BLM speculated that the mining methods would be similar to those presently employed at the Mine, but that it is presently impossible to tell exactly how the coal would be mined. *Id.* Ultimately, BLM concluded that the impacts would be similar to the present mining scenario. AR 24 at 495. The Court does not fault BLM for not engaging in a substantial analysis on future mining plans, as it constitutes a "hypothetical scenario" for which there are no current plans. *Headwaters*, 914 F.2d at 1182.

The EA also has a section entitled "Cumulative Impacts," which together with its subparts spans 14 pages. AR 24 at 495-509. While noting that continued mining operations would incrementally add to cumulative impacts, BLM

concluded that these impacts would be minor. AR 24 at 495. The short-term effects of subsidence are mitigable and no impact would likely reach a moderate or severe level. *Id.* In reaching that conclusion, BLM examined the cumulative impacts to the topography, air quality, water resources, and soils. AR 24 at 495-509. In each section, BLM concluded that the cumulative impacts would be minor. *Id.*

The Board concluded that the EA adequately looked at the cumulative impacts. Given that BLM took a hard look at the cumulative impacts, this Court is bound to defer to the Board's decision.

VI. Alternatives

Northern Plains' final argument is that BLM erred by not considering an adequate range of alternatives. Northern Plains points out that BLM only considered two options: the proposed action and the required "no action" alternative. Since the Board failed to address this argument, Northern Plains urges that at a minimum, the Court should remand this case back to the Board for consideration of the issue. BLM and Signal Peak counter that there were no other reasonable alternatives to consider. The Court agrees with Northern Plains that the Board acted arbitrarily and capriciously by not addressing its alternatives argument.

NEPA requires federal agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C. § 4332(E). Agencies are afforded "considerable discretion to define the purpose and need of a project." Friends of Se. Future v. Morrison, 153 F.3d 1059, 1066 (9th Cir. 1998). Alternatives that do not advance the purpose of the project are not considered reasonable or appropriate. *Id.* at 1247. "In rejecting any alternatives, the agency must only include 'brief discussions of the need for the proposal, of alternatives required by [42 U.S.C. § 4332(E)], of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted." Native Ecosys. Council, 428 F.3d at 1246 (quoting 40 C.F.R. § 1508.9(b)). "An agency's obligation to consider alternatives under an EA is a lesser one than under an EIS." Id. Even in an EA, agencies are required to consider alternatives and give meaningful consideration to all reasonable alternatives. Te-Moak Tribe, 608 F.3d at 602.

In the opening brief in its administrative appeal to the Board, Northern Plains argued that BLM failed to consider other reasonable alternatives in the EA. AR 13 at 208-210. It was not just a passing argument, but rather one of their five issues. AR 13 at 189. In this section, Northern Plains argued that BLM should have addressed alternatives such as "making the lease seam-specific" and

examining "alternative mining techniques to long-wall mining such as the room and pillar mining (in which the pillars keep the overburden from collapsing, eliminating or lessening subsidence issues)." AR 13 at 209. In its reply brief, Northern Plains again raised the argument that BLM should have considered the alternative of a seam-specific lease. AR 5 at 103-04. Nonetheless, the Board did not mention or discuss Northern Plains' alternatives argument.

The Court is reviewing the Board's decision to determine if it was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). This standard requires the agency to "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983) (internal citation omitted). A decision is arbitrary and capricious if it fails to address part of the alleged problem. *Id.* If an agency neglects to consider an aspect of the decision, "[t]he reviewing court should not attempt itself to make up for such deficiencies" and cannot "supply a reasoned basis for the agency's action that the agency itself has not given." Id. (internal quotation omitted). Nor can a reviewing court base its decision on the parties' 'post hoc' rationale that is not part of the administrative record complied by the agency. Citizens to Pres. Overton Park, Inc. v. Volpe, 401 U.S. 402, 419 (1971).

When an agency fails to adequately explain a decision, the reviewing court should remand the action to the agency with instructions to address the neglected argument. *Nat'l Wildlife Fed'n v. F.E.R.C.*, 801 F.2d 1505, 1511-12 (9th Cir. 1986). The reviewing court cannot simply infer that the agency considered the challenger's objections and rejected them. *Beno v. Shalala*, 30 F.3d 1057, 1075 (9th Cir. 1994). "It is well-established that an agency's action must be upheld, if at all, on the basis articulated by the agency itself." *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 50.

Because it failed to address Northern Plains' alternatives argument, this

Court is unable to determine whether the Board acted arbitrarily and capriciously.

Nat'l Wildlife Fed'n, 801 F.2d at 1511. Both BLM and Signal Peak advance

arguments why Northern Plains' proposed alternatives are not reasonable or

inappropriate for inclusion in the EA. However, these responses to Northern

Plains' arguments are not found in the Board's decision. They are attempts at

"post hoc rationalizations" that this Court is prohibited from relying upon to

uphold the Board's decision. Overton Park, 401 U.S. at 419.

Therefore, the Court remands this case back to the Board for further consideration of Northern Plains' proposed alternatives. The Court currently does not express an opinion as to whether the EA addressed an adequate range of alternatives.

VII. Conclusion

For the foregoing reasons, the Court finds that BLM did not err it when issued a FONSI rather than prepare an EIS. The Court further finds that with the possible exception of considering a reasonable range of alternatives, the EA is sufficient. Since the Board did not consider Northern Plains' alternatives argument, the Court remands the case for the limited purpose of addressing that argument.

Accordingly, IT IS HEREBY ORDERED:

- Northern Plains' Motion for Summary Judgment (Doc. 33) is GRANTED
 as to Count IV of the Complaint for the reasons discussed above, but
 DENIED in every other aspect.
- BLM's and Signal Peak's Motions for Summary Judgment (Docs. 39 and 40) are DENIED as to Count IV of the Complaint for the reasons discussed above, but GRANTED in every other aspect.
- 3. This case is remanded back to the Interior Board of Land Appeals for consideration of Northern Plains' argument that BLM's discussion of alternatives in the EA is inadequate.
- 4. The Clerk of Court shall enter judgment accordingly and close this case.

DATED this $\frac{\mathscr{S}'}{day}$ of March, 2016.

SUSAN P. WATTERS
United States District Judge